

Abstract*Use Figure 3*

This invention relates to transfer points for flowable particulate bulk materials, particularly transfer chutes and more particularly to a method of operating and constructing such chutes. In one form, this invention provides a method of using the design capabilities afforded by transfer chutes like the chute described and claimed in SA Patent 91/7215 - Chute (Baller). These chutes use cascade formations to accumulate quantities of the bulk materials being conveyed thereby to create an accurately definable chute liner. This invention provides a method of utilising this design capability to create a self-lining materials transfer chute 200. The method comprises the steps of using a plurality of cascade formations (such as trays 224) with free edges that project into the chute and face the intended incoming materials flow 216. The trays 224 define ledges that serve, co-operatively, as dead boxes into which the bulk material is projected upon material flow through the chute. The trays are dimensioned such that the dead boxes accumulate just sufficient of the conveyed material to form a lining of accumulated material through which only parts of the free edges of the trays 224 are exposed to the bulk material flowing through the chute. The trays 224 are dimensioned such that the trays 224 and the material accumulated therein are adapted, in use, to form a composite dead box, the surface of which is exposed, as a wear surface 228, to the incoming material. The wear surface 228 is accurately determinable since it is co-extensive with imaginary lines of curvature connecting the free edges of the trays 224. This makes it possible, once the designer has determined the flow characteristics desired of the flowing stream of material 216, to dimension the trays 224 in dependence on these desired flow characteristics.